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## VIA ELECTRONIC FILING

Ms. Marlene Dortch  
Secretary  
Federal Communications Commission  
445 12th Street SW  
Washington DC 20554

**Re: Improving Wireless Emergency Alerts and Community-Initiated Alerting, PS Docket No. 15-91.; Amendment to Part 11 of the Commission's Rules Regarding the Emergency Alert System, PS Docket 15-94**

Dear Ms. Dortch:

In our letter filed on September 25<sup>th</sup>, 2017, AT&T submitted a graph to show the potential impact of including compressed vertex information (to enable device-based geotargeting) on Wireless Emergency Alert message length. The compression rates were based on a 2015 Department of Homeland Security (DHS) study<sup>1</sup> that indicated that the latitude and longitude data in a WEA alert could be compressed by 13.7% to 21.4%. We have come to understand that our September 25<sup>th</sup> letter misinterpreted the DHS study to suggest that the original data would be compressed *by* these percentages rather than compressing the original data *to* these percentages.

Accordingly, the purpose of this letter is to provide an updated graph (attached) that accounts for the correct interpretation of the DHS study. The underlying assumptions from our September 25<sup>th</sup> letter remain the same, and the conclusion remains substantially similar. Specifically, the chart includes GPS coordinates with 3-digit precision (which equates to approximately +/- 110m) and a 6-character delimiter symbol to separate the coordinates from the displayable text. It also assumes the coordinates and message content are carried as payload in the same WEA message to minimize the complexity of broadcasting the polygon coordinates to the mobile device. However, the precision of the coordinates and the size of the delimiter symbol may change, given that the standards for device-based geotargeting has not yet been completed. The graph has also been updated to include the maximum number of vertices that may be included in a WEA message. The updated graph is presented in Attachment 1 to correct the record.

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<sup>1</sup> See U.S. Department of Homeland Security (DHS) Science and Technology Directorate (S&T), "Wireless Emergency Alerts, Arbitrary Location-Aware Targeting Final Report", June 2015.  
<https://www.dhs.gov/sites/default/files/publications/WEA%20JHU%20APL%20ASLAT%20Final%20Report.pdf>

Pursuant to the Commission's rules, a copy of this letter is being filed electronically in the above-referenced docket. Please do not hesitate to call me if you have questions.

Sincerely,

/s/ Joseph P. Marx  
Assistant Vice President, AT&T Services Inc.

Cc:  
Marcus Brown  
Megan Henry  
Linda Nagle  
Rasoul Safavian  
Emily Tlaga  
James Wiley

Attachment

Attachment 1: Impact on WEA Message Length

